IN THE CLAIMS:

Please amend the claims as follows:

1. (Cancelled).

2. (Cancelled).

3. (Cancelled).

4. (Cancelled).

5. (Cancelled).

6. (Cancelled).

7. (Cancelled).

8. (Cancelled).

9. (Cancelled).

10. (Cancelled).

11. (Cancelled).

12. (Cancelled).

13. (Cancelled).

14. (Cancelled).

15. (Cancelled).

16. (Currently amended) A method for fabricating a semiconductor device, comprising the steps of:

(a) forming an element isolation film on an SOI substrate including at least an insulator layer and a semiconductor layer formed on the insulator layer, the element isolation film surrounding the semiconductor layer;

(b) after the step (a), forming a lattice defect region, a high-concentration channel region and a channel region in the semiconductor layer by implanting, into the semiconductor layer, impurity ions of a first conductivity type, having an atomic radius larger than an atomic radius of an element composing the semiconductor layer, such that a concentration of the ~~semiconductor layer~~ impurity ions reaches a maximum in a region in the vicinity of an interface between the semiconductor layer and the insulator layer;

(c) after the step (b), forming a gate insulator film on the semiconductor layer;

(d) forming a gate electrode on the gate insulator film;

(e) forming source/~~region~~ drain regions in respective regions of the semiconductor layer by introducing an impurity of a second conductivity type into the semiconductor layer by using the gate electrode as a mask, the source/drain regions being located on right and left sides of the gate electrode; and

(f) after the step (e), diffusing and activating the impurity of the first conductivity type and the impurity of the second conductivity type by heat treatment.

wherein in step (b), the lattice defect region is formed so as to cover the entire surface of the insulator layer which is not covered by the element isolation film, and the high-concentration channel region is formed on the lattice defect region.

17. (Original) The method for fabricating a semiconductor device of claim 16, wherein the semiconductor device is an n-channel type transistor, and

in the step (b), ions of a Group 3b element are used as the impurity ions of the first conductivity type.

18. (Original) The method for fabricating a semiconductor device of claim 17, wherein the semiconductor layer is composed of silicon single crystals, and

in the step (b), ions of at least one of gallium, indium and thallium are used as the ions of the Group 3b element.

19. (Currently amended) A method for fabricating a semiconductor device, comprising the steps of:

(a) forming an element isolation film on an SOI substrate including at least an insulator layer and a semiconductor layer formed on the insulator layer, the element isolation film surrounding the semiconductor layer;

(b) after the step (a), implanting, into the semiconductor layer, ions of an element having such properties as causing lattice defects in the semiconductor layer, such that a concentration of ~~the semiconductor layer~~ impurity ions reaches a maximum in a region in the vicinity of an interface between the semiconductor layer and the insulator layer;

(c) after the step (a), forming a high-concentration channel region and a channel region by implanting impurity ions of a first conductivity type into the semiconductor layer such that the concentration of the ~~semiconductor layer~~ impurity ions reaches a maximum in a bottom region of the semiconductor layer;

(d) after the steps (b) and (c), forming a gate insulator film on the semiconductor layer;

(e) forming a gate electrode on the gate insulator film;

(f) forming source/~~region~~ drain regions in respective regions of the semiconductor layer by introducing an impurity of a second conductivity type into the semiconductor layer by

using the gate electrode as a mask, the source/drain regions being located on right and left sides of the gate electrode; and

(g) after the step (f), diffusing and activating the impurity of the first conductivity type and the impurity of the second conductivity type by heat treatment,

wherein in step (b), the lattice defect region is formed so as to cover the entire surface of the insulator layer which is not covered by the element isolation film.

20. (Original) The method for fabricating a semiconductor device of claim 19, wherein in the step (b), ions of a Group 4b element are used as the ions of the element having such properties as causing the lattice defects.

21. (Original) The method for fabricating a semiconductor device of claim 20, wherein in the step (b), ions of at least one of carbon, silicon and germanium are used as the ions of the Group 4b element.

22. (Original) The method for fabricating a semiconductor device of claim 19, wherein in the step (b), ions of a Group 0 element are used as the ions of the element having such properties as causing the lattice defects.

23. (Original) The method for fabricating a semiconductor device of claim 22, wherein in the step (b), ions of at least one of argon, krypton and xenon are used as the ions of the Group 0 element.

24. (Withdrawn) A method for fabricating a semiconductor device, comprising the steps of:

(a) forming an element isolation film on an SOI substrate including at least an insulator layer and a semiconductor layer formed on the insulator layer, the element isolation film surrounding the semiconductor layer;

(b) forming a semiconductor layer of a first conductivity type including at least a channel region in the semiconductor layer by introducing an impurity of the first conductivity type into the semiconductor layer;

(c) forming a gate insulator film on the semiconductor layer;

(d) forming a gate electrode on the gate insulator film;

(e) forming insulator sidewalls on both side faces of the gate electrode;

(f) forming source/drain regions in respective regions of the semiconductor layer by introducing an impurity of a second conductivity type into the semiconductor layer by using the gate electrode and the insulator sidewalls as a mask, the source/drain regions being located on right and left sides of the gate electrode;

(g) forming silicide films on the gate electrode and the source/drain regions, respectively;

(h) selectively removing the insulator sidewalls;

(i) implanting ions of a hole-eliminating element into the semiconductor layer by using the silicide films as a mask such that a concentration of the semiconductor layer reaches a maximum in a region in the vicinity of an interface between the insulator layer and the semiconductor layer; and

(j) diffusing and activating the impurity of the first conductivity type and the impurity of the second conductivity type by heat treatment.

25. (Withdrawn) The method for fabricating a semiconductor device of claim 24, wherein in the step (i), ions of an element having such properties as causing lattice defects are used as the ions of the hole-eliminating element.

26. (Withdrawn) The method for fabricating a semiconductor device of claim 25, wherein in the step (i), ions of a Group 4b element are used as the ions of the element having such properties as causing the lattice defects.

27. (Withdrawn) The method for fabricating a semiconductor device of claim 26, wherein in the step (i), ions of at least one of carbon, silicon and germanium are used as the ions of the Group 4b element.

28. (Withdrawn) The method for fabricating a semiconductor device of claim 25, wherein in the step (i), ions of a Group 0 element are used as the ions of the element having such properties as causing the lattice defects.

29. (Withdrawn) The method for fabricating a semiconductor device of claim 28, wherein in the step (i), ions of at least one of argon, krypton and xenon are used as the ions of the Group 0 element.

30. (Withdrawn) The method for fabricating a semiconductor device of claim 25, wherein in the step (b), the impurity ions of the first conductivity type are implanted into the semiconductor layer such that a concentration of the semiconductor layer reaches a maximum in a bottom region of the semiconductor layer, thereby forming a high-concentration channel region and the channel region in the semiconductor layer.

31. (Withdrawn) The method for fabricating a semiconductor device of claim 24, wherein in the step (i), impurity ions of the first conductivity type having a concentration higher than a concentration in the channel region are used as the ions of the hole-eliminating element.

32. (Withdrawn) The method for fabricating a semiconductor device of claim 31, wherein in the step (i), a dose of the impurity ions of the first conductivity type is set at $5\times10^{13}/cm^3$ or larger.